

Rabbit PSMB5 Polyclonal Antibody | anti-PSMB5 antibody

PSMB5 Antibody

CATALOG # AAA326492	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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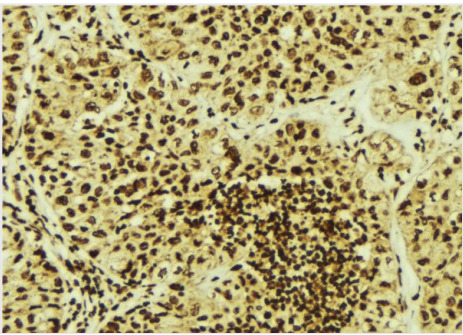
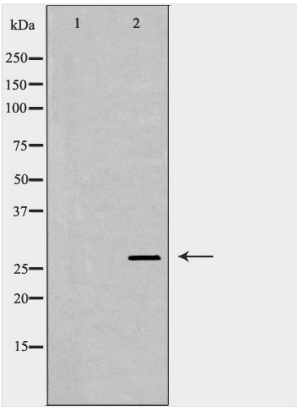
PRODUCT SYNONYMS

PSMB5; Polyclonal Antibody; PSMB5 Antibody; DKFZp459C139; EC 3.4.25.1; LMPX; Macropain epsilon chain; MB1; MGC104214; MGC118075; MGC134464; Multicatalytic endopeptidase complex epsilon chain; Proteasome (prosome; macropain) subunit; beta type; 5; Proteasome beta 5 subunit; Proteasome catalytic subunit 3; Proteasome chain 6; Proteasome epsilon chain; Proteasome subunit beta type-5; Proteasome subunit MB1; Proteasome subunit X; Proteasome subunit; beta-5; PSB5_HUMAN; PSX large multifunctional protease X; X; anti-PSMB5 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PSMB5 antibody detects endogenous levels of total PSMB5
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	160
Applicable Applications for anti-PSMB5 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PSMB5
Subcellular Location	Cytoplasm. Nucleus.
Tissue Specificity	Down-regulated by IFNG/IFN-gamma (at protein level). Induced in breast cancer tissue. Up-regulated by sulforaphane in breast cancer cells.
Predicted Cross Reactivity	Bovine, Horse, Sheep, Rabbit, Dog, Xenopus
Similarity	Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Xenopus (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326492 at 1/100 staining Human breast cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Hela whole cell lysates, using PSMB5 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-PSMB5 antibody

Description: The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes a member of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit in the proteasome. This catalytic subunit is not present in the immunoproteasome and is replaced by catalytic subunit 3i (proteasome beta 8 subunit). Multiple transcript variants encoding different isoforms have been found for this gene.

Function: Component of the 20S core proteasome complex involved in the proteolytic degradation of most intracellular proteins. This complex plays numerous essential roles within the cell by associating with different regulatory particles. Associated with two 19S regulatory particles, forms the 26S proteasome and thus participates in the ATP-dependent degradation of ubiquitinated proteins. The 26S proteasome plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins that could impair cellular functions, and by removing proteins whose functions are no longer required. Associated with the PA200 or PA28, the 20S proteasome mediates ubiquitin-independent protein degradation. This type of proteolysis is required in several pathways including spermatogenesis (20S-PA200 complex) or generation of a subset of MHC class I-presented antigenic peptides (20S-PA28 complex). Within the 20S core complex, PSMB5 displays a chymotrypsin-like activity.

Subunit Structure: The 26S proteasome consists of a 20S proteasome core and two 19S regulatory subunits. The 20S proteasome core is a barrel-shaped complex made of 28 subunits that are arranged in four stacked rings. The two outer rings are each formed by seven alpha subunits, and the two inner rings are formed by seven beta subunits. The proteolytic activity is exerted by three beta-subunits PSMB5, PSMB6 and PSMB7. Directly interacts with POMP (PubMed:15944226). Interacts with HIV-1 TAT protein (PubMed:14550573). Interacts with ABCB1 and TAP1 (PubMed:15488952).

Similarity: Belongs to the peptidase T1B family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	195539356
NCBI GeneID	5693
NCBI Accession #	NP_001124197.1
NCBI GenBank Nucleotide #	NM_001130725.1
UniProt Accession #	P28074; Q16242; Q6PEW2; Q7Z3B5; Q86T01; Q9TNN9; B2R4N9; B4DUM9; D3DS43; E9PAV2
Molecular Weight	Observed: 28 kDa Predicted: 29 kDa

NCBI Official Full Name	proteasome subunit beta type-5 isoform 2
NCBI Official Synonym Full Names	proteasome subunit beta 5
NCBI Official Symbol	PSMB5
NCBI Official Synonym Symbols	X; MB1; LMPX
NCBI Protein Information	proteasome subunit beta type-5
UniProt Protein Name	Proteasome subunit beta type-5
UniProt Gene Name	PSMB5
UniProt Synonym Gene Names	LMPX; MB1; X

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/psmb5-antibody-immunohistochemistry-western-blot-elisa/326492>